## Overview:

Navigator is just one in a long list of new products developed each year by Time Warner Cable. Notable past successes in this arena include hybrid fiber/coax system design, high speed internet, Video on Demand (VOD), subscription VOD, and digital phone.

New products are always brought to market in selected locations rather than across a national footprint. Lincoln, Milwaukee, and Kansas City were selected first for Navigator because Passport was the native guide and the systems had the capacity to manage the product roll-out. (See answer to question 15 first request) While Lincoln was an early market for Navigator in 2006, during the same time period, other Divisions were implementing new products and services such as digital simulcast, cell phone, start-over, and Interactive TV.

Lincoln, Milwaukee and Kansas City were selected to launch Navigator, but the actual implementation process and experience varied a great deal by market because of differences from system to system which include equipment types, billing system interface, supported channels, and last but not least, the relative size of the customer base. Because of these differences, gathering information from other Divisions to respond to questions such as 11, 14, 45 (First Request) and 4 (Second Request.) is not helpful or relevant.

First Request for Information

#### Terms

TWC shall mean Time Warner Cable of Lincoln. TW shall mean Time Warner nationally.

1. In your post-launch letter to customers, you mention that one of the reasons for a change to the Navigator is that sticking with the Passport "would inhibit our ability to meet looming, new, security and regulatory requirements from the FCC." Could you expand on that, and tell us the specific FCC language, preferably with an identifying regulation number of some type, which made the change necessary?

This is in reference to the FCC rule prohibiting cable operators, as of July 1, 2007, from placing in service new navigation devices (e.g. set-top boxes) that perform both conditional access and other functions in the same integrated device. This rule is also often referred to as the "integration ban" or the "separable security" requirement. (47 C.F.R. §76.1204(a)(1)). We believed that Navigator would help facilitate compliance with the rules.

2. Later in that same paragraph, you state that "we felt so strongly that we should not be dependent on a third party to develop and maintain such a critical customer interface as the program guide."
(a) What made the time crunch so pressing that you decided to move ahead on distributing the new guide without more comprehensive testing?

Navigator was tested and researched extensively prior to launch. Several factors played a role in the timing of the roll out. First, the July 1, FCC deadline mentioned above; second, our desire to provide our customers with advanced technology that would not only enhance their viewing, but would also provide a platform to continue adding new services like more channels in HD.

(b) Did you in fact move away from a third party vendor to an internally owned piece of technology, or did you not just switch to a different third party vendor? OpenTV is claiming credit for the enabling middleware.

Yes, we moved away from a vendor supplied set-top box navigator IPG to an internally developed product. We did not move to another third party. Time Warner and OpenTV do have a business relationship for software product development but it is completely unrelated to Navigator. We believe that you are referring to a recent announcement that Open TV is providing the middleware for a limited number of Time Warner Cable Divisions with the Motorola platform.

(c) Why do you think that the Navigator stands a chance of getting fixed anytime soon, given that it's apparently been in existence since October of 2003 and still has the kinks that we're seeing today. What assurances can TWC give us that they're now going to make the Navigator a priority, since they clearly didn't correct all of the bugs when it was previously supposed to be part of a major project?

Efforts to stabilize Navigator are the <u>highest priority</u> for Time Warner's engineering team. This version of Navigator has not been in existence "since October of 2003." Please refer to question 16, second request for information, for a product timeline

3. In reviewing other various markets, Lincoln seems to be coming up on the short end of the stick in every area where there are differences in the capabilities. Lincoln offers viewers the chance to scroll ahead up to 7 days in the future, while San Diego, Kansas City, Desert Cities, and Milwaukee offer 14 days. Raleigh/Durham joins us at 7 days on that one, but they along with those other five outlets (and not Lincoln) offer their viewers an answer to the question "How do I cancel a TWC Navigator™ On Demand and/or Pay Per View program?" You stated in your post-launch letter that Lincoln was a beta market for the Navigator. Why, as a beta market, aren't we getting better, or at least more, features than other communities, rather than less?

The number of days of guide data can vary by location. There was no reduction in days of guide data with the transition from Passport to Navigator. Navigator also supports cancellation of a PPV program. Please provide the source of your data for more clarification.

4. Did TWC understand that the software was "beta" before they began

The software was not beta. While The Nebraska Division was early to market with Navigator, the beta-tests actually took place in a number of laboratory environments as well as Time Warner Cable employee homes throughout the country.

5. Is there a Time Warner corporate policy that customers are not notified that software is still under development? What is the corporate policy in these instances?

### No

6. Did TWC have any choice in how Navigator was presented to its customers? In other words, were those decisions made higher up in the TWC hierarchy? If TWC had some control over such decisions, what decisions were made locally?

Decisions for deployment of the Navigator software were initially made at the corporate level. However, the local division was in close contact with corporate throughout the process and initiated its own roll-out schedule for the Nebraska Division. In addition, during initial review of the product by our employees, several enhancements were recommended and initiated.

7. What will TWC do to prevent beta-testing of hardware or software without notice or compensation in the future?

As stated earlier, this was not a beta test. Beta tests are not conducted on customers.

8. What programming guide and DVR software does TW offer in other communities it serves? Please provide a complete listing of what programming guide and DVR software TW uses across the country and the associated locations?

TW Cable customers are fairly equally distributed between the Scientific Atlanta SARA guide, Passport, and the new Adelphia properties on the I-Guide (Motorola) platform. Passport is active in 9 operating divisions; Sara is active in 12 operating divisions; Motorola is active in 3 operating divisions.

9. How many Navigator customers in Lincoln are there?

Specific subscriber data is confidential and competitively sensitive information.

10. What is the average bill of a digital cable subscriber, with just a guide set-top box, and with a DVR?

The Digipic 1000 (non-promotional rate) includes basic cable, the digital product tier (DPT), the sports tier, Navigator interactive guide, and one converter box is \$68.70/mo. DVR service is an additional \$5.95/mo. The introductory promotional

rate is \$49.95/month plus the cost of the DVR.

11. What month and year did the conversion to the customers begin, (ie. When the first Navigator boxes went to ordinary customers) in the three cities, Milwaukee, Kansas City, and Lincoln, which were indicated to be rolling Navigator out?

The roll-out to customers began in August 2006 and ended Dec. 15, 2006. Refer to overview for status information on other locations.

12. What months were customers in transition in three cities, ie. both Passport and Navigator being supported simultaneously?

Nebraska supported both Passport and Navigator customers until all customers were converted to Navigator in mid-December.

13. When was Passport discontinued in the three cities?

Passport was discontinued in Lincoln in mid December, 2006.

14. In cities where TW has previously provided Navigator, are all customers using it, or are some still using other software? Please provide a detailed breakdown of what customers are using what software on what boxes in Milwaukee, Kansas City, and any other city where Navigator has been tried.

Please refer to overview for status information on other locations.

15. How was Lincoln chosen to be the first or one of the first rollout sites for Navigator?

Passport Divisions were selected for early conversion in order to launch new services like Caller ID on TV, Start Over, Quick Clips, and a variety of interactive services. Lincoln was part of an initial cluster of Passport Divisions with a conversion schedule for all other Passport divisions to be implemented as quickly as possible.

16. What was the timeline of the rollout here in Lincoln? What dates was it put on what boxes?

# August through December 2006.

17. In what city are the Navigator programmers based? How many of them are there? How often have they visited Lincoln and how long have they stayed? Have they visited with any Lincoln customers directly--in person or on the phone?

The software development team is located in Westminster, Colorado at Time Warner Cable's Advanced Technology Group. At this time, there are a total of 118 people (at this office) involved with software product development across Response to City of Lincoln Performance Evaluation Time Warner Cable – April 24, 2007

several programs of which Navigator is a primary focus. Time Warner also has resources dedicated to Navigator from other departments including groups in Charlotte, NC and Stamford, CT.

Members of the core engineering and development team have made visits to Lincoln on many occasions dating from September 2005 (approximate date of initial Alpha head-end software install). Beginning in June 2006, the Westminster group has been dedicated to supporting the Lincoln Division during the Alpha and Beta testing efforts with members of technical staff and management team members visiting, on average, every few weeks. Engineering support team and developers have been tasked in Lincoln, on-site, for multiple day stretches beginning in August 2006. Since January 2007, direct support – with persons from the core development group - for Lincoln has been in place 24x7. We have had individual development engineers "sit in and listen" with Lincoln's Technical Service Representatives in an effort to help tailor questions (and receive answers).

18. What is your best estimate of the percentage of TWC Navigator customers that paid for services they did not consistently receive?

## Unknown

19. How many TWC Navigator customers are still not receiving consistent service from the Navigator service?

## Unknown

20. How many customers were issued a "credit" or other compensation due to complaining about Navigator?

Specific credit information is confidential and competitively sensitive information. Our willingness to extend and offer credits has been well publicized. Customers do not shy away from asking for credits when they feel they deserve some form of compensation.

21. What various kinds of credit or compensation were they issued...dollars or services or other? Please indicate numbers of customers for each. Please indicate the value of the non monetary credits or compensation.

Because we wanted to give the customer what was most valued to them, we gave options for credits, including free HBO or Showtime or credits on their digital, DVR, or HD services. The value of the credits varied by the individual situation.

22. What form of credit or compensation has been most popular or agreeable with these customers?

Refer to question 21, customer selected preferred option.

Response to City of Lincoln Performance Evaluation Time Warner Cable – April 24, 2007 23. What criteria was used to determine whether to issue the credit? Please explain the evaluation process.

We have been very liberal with our credits. Our frontline employees are empowered to use their best judgment and to defer in favor of the customer without seeking a supervisor's approval.

24. What criteria were used to determine the amount of the credit issued? Please explain the evaluation process.

## Duplicate question to 23.

25. How many telephone complaints are logged on a daily basis?

We do not track "complaints" but do take approximately 1,500 to 2,000 calls a day. Calls include general questions about services; billing; transfers of service; upgrades in service; downgrades; etc.

26. Must a customer send a written complaint to be compensated for problems or are telephone and email complaints compensated as well?

Customers who have contacted us by telephone and email have also been given credits if the situation warranted a credit.

27. Out of all Lincoln customer written, email, and telephone contacts to TWC, between November 1, 2006 and the completion of the recent patch (March 2007), what percentage of contacts were complaints about Navigator? What is the percentage of contacts about Navigator since the patch?

## Unknown

28. What is the percent of customers who have Navigator service who have complained (via phone call, e-mail, etc.) about their Navigator service.

# Please refer to question 25 above.

29. Aside from software issues, to what extent are problems associated with converters, wiring, and other hardware? To what extent are Navigator use problems solved by exchanging a converter for a new one? Must customers go to Time Warner to exchange converters or can service calls be arranged without charge to upgrade converters, evaluate wiring, etc., relative to complaints about Navigator? What has been the policy associated with such service call procedures relative to customer convenience and satisfaction? (i.e., action within 24 hours, availability after hours, etc.)

A bad converter, low signal, or faulty wiring in and around the home will result in sub-standard video service which could easily be misconstrued as a Navigator issue. Converters and DVRs are prone to failure over time as with any other hardware item. In those cases equipment exchange is necessary. An exchange is executed at the preference of the customer at either our walk-in locations or via a free service call.

30. How many TWC Customers have dropped their subscription because of the Navigator problems?

### Unknown

31. When does TWC think they will have this software program running without any problems?

As with any software, there will always be version enhancements. As such, we can again assure you (1) this is a top priority for the Company and (2) there are plans to continue to enhance The Navigator product over the next several years.

32. What would it take to offer Passport again on boxes in Lincoln for those customers who request it?

There is no easy answer for this question. It would take extensive steps to execute and accomplish the task and it would not be without considerable additional customer disruptions and negative consequences. A conversion from Navigator back to Passport has never been done and migration programs to preserve settings and content do not exist.

33. Can a customer request a CableCARD today, and if so, what features are not available through the use of a CableCARD and require a TW settop box to get? What are TW's future plans regarding CableCARD? When will it be possible to buy a third-party set-top box and, using a CableCARD, get the TW video-on-demand and all other TW content?

A customer can "request a CableCARD today," but they will likely be using a "one-way host" - typically a television set purchased at retail with a "CableCARD Slot" - which (upon receiving a CableCARD from Time Warner Cable) will allow the customer to receive broadcast, digitally encrypted channels from the operator (e.g., HBO). The advent of "two-way hosts" is upon us but they are very scarce at this point (the only one we are aware of is the Samsung, large screen, DLP television host developed as part of our OCAP/ODN efforts). Therefore, if a customer has a one-way host with a CableCARD, they cannot receive our twoway, interactive services, e.g., Video On Demand, nor can they received other enhanced services, e.g., CallerID on TV. The availability of set-top boxes, or other devices, at retail that will support all TWC's two-way, interactive services depends on consumer electronics manufacturers and retailers deciding to manufacture and carry these products in their stores. With compliance to OpenCable OCAP, these devices can be provisioned with all of TWC's current interactive, two-way, digital services if the customer has (a) the "two-way host" (television, set-top box, etc.), (b) the Multistream CableCARD to authorize the device, and (c) receives the download of TWC's OCAP Digital Navigator with

subscription to the commensurate suite of services.

34. Would TWC officials characterize the launch of Navigator a failure? If not a failure, what word would TWC choose?

#### No

35. Is it fair to say that TWC was not equipped to handle the volume of complaint calls, and subsequent service calls? Some specifics here would be helpful.

We have been very clear that this was a challenging project, but we also went to extraordinary steps to inform customers throughout the conversion. All customers received multiple mail communications and phone reminders prior to their conversion. A detailed user's guide was included in the mailings. "Answers on Demand", our digital help channel on channel 100, as well as our website were customized for Navigator support. To manage the expected questions from customers, the roll-out was slow and deliberate, spanning a number of months. Temporary staff was hired to help with the call volume during the conversion period

- 36. Please provide: (a) A breakdown of the prices charged consumers for Navigator DVR service, converter, remote (including any volume or cross platform discounts); (b) a breakdown for Passport revenues for 2006; (c) a breakdown of the total revenues received for Navigator services (including converter and remote); and, (d) the amount of financial support or compensation given by corporate (Time Warner, Inc.?), to the local system for the rollout of Navigator, if any.
- (a) DVR service -\$5.95/mo; Converter/remote rental \$7.95/mo.
- (b) none (C) Confidential and Proprietary data (D) Not applicable
- 37. Ann Shrewsbury told the Cable Board on 1/26/06 that TWC had three levels of customer relations, the customer service reps who answer the phones, their supervisors and her. Ann said she spent half her day dealing with customers the first two levels hadn't satisfied. What can customer service reps do and not do? How much more can supervisors do? What can Ann do that neither of lower levels can do? Is Beth the final appeal and is there anyone between Ann and Beth?

Our customer service reps and supervisors are well trained and equipped to handle customer inquiries and issues. Sometimes, customers just want to talk to someone else, and Ann, Beth and the rest of the leadership team are happy to respond to customer needs.

38. Does TWC corporate have a "help desk" or appeal process that is available above the Nebraska division?

Occasionally a customer contacts the corporate office with a problem/issue, in which case the Nebraska Division is notified and someone locally addresses the

customer's concerns.

39. What can a customer do if TWC hasn't satisfied him/her? Is the Cable Board the next step? Does TWC inform customers of this? How and when?

A complaint to the city is in turn referred to TWC and resolved. We provide multiple venues, including a new customer handbook, that encourage subscribers to contact our customer service department, as they are the ones best trained and equipped to solve problems.

40. Does any other body, like the Nebraska Public Service Commission, have oversight over customer service issues? Is TWC a member of the Better Business Bureau? If so, are customer complaints sometimes arbitrated here?

There is no customer service oversight by the PSC. Occasionally an individual complaint is filed with the Nebraska Attorney General or the FCC consumer complaint division. We promptly respond the dispute and file a response to the government authority.

Time Warner Cable is a member of the Better Business Bureau. Although we rarely receive formal complaints from the BBB, when we do, we respond to the complaint and the customer and file our response with the BBB.

41. Does the TWC website have a "complaints" page or heading? What options does it offer for the unhappy customer?

We have a customer service section as well as a "contact us" section on our website. If a customer is not satisfied with the initial response it can be escalated.

42. Does TWC have an established complaints policy that a customer can refer to? If so, what is it?

Our customer handbook provides a section on complaint resolution which is provided at the time of installation. Customers annually receive a notice required by the FCC that outlines support, service, and repair policies.

43. Is an email considered a written complaint?

No. Email is considered an "electronic" format of complaint.

44. Please list all TWC system wide efforts chronologically that were taken to resolve the Navigator software problems.

As with any new product launch, the Nebraska Division has been in close contact with the developers since we began working on deployment to employees last April. We have listened to the comments/suggestions from employees, and have

continued to gather information/feedback from customers since last August. Customers' comments and suggestions are forwarded to the development team each week as the software continues to be advanced.

45. Please indicate what types and amounts of credits were given in Milwaukee and Kansas City for complaint resolutions related to Navigator service. Who are the contact persons in those cities?

# Please refer to overview for status information on other locations

Second Request for Information

#### Terms

TWC shall mean Time Warner Cable of Lincoln. TW shall mean Time Warner nationally.

1. Who developed the Navigator system, when, and why?

Time Warner Cable developed Navigator over a period of several years to manage new product development and deployment.

2. Who made the decision nationally to use Lincoln as a test city?

Refer to First Request for Information Question 15.

3. State the number of complaints received from Lincoln customers regarding Passport for the past five years.

#### Unknown

4. State the number of complaints received from the other areas where Navigator is being used, Kansas City and Milwaukee, and what has been done there to solve the proble ms.

## Please refer to overview for status information on other locations

5. Has there been any litigation in these other cites regarding this issue?

No.

6. Have there been any complaints filed with the various state's attorney generals regarding this issue in the other

cities?

No.

7. State the total cost to TWC for the Navigator as compared to the Passport unit.

The investment in Navigator was and continues to be substantial and was not intended to save money. Navigator is necessary to remain competitive and an industry leader in the development and implementation of new customer services through advanced technology.

8. State the increase in monthly revenues since Navigator was installed.

Confidential and Proprietary Data

9. What does Navigator do that Passport doesn't and visa versa?

Passport and Navigator are, on balance, very similar products. They both utilize a grid design to provide programming information and portals for search, access to Video on Demand, and DVR features. While similar in overall functionality, the user interface is slightly different in each product. The primary difference is that Navigator, unlike Passport, is compatible with features that customers in other Time Warner locations have soundly endorsed like caller ID on TV, Start Over, Quick Clips and personal interactive TV. Passport is a very competent guide company, but Navigator is the key to our future.

10. What was the cost to TWC for Passport, as compared to Navigator?

See answer to Question 7

11. Please describe how TWC staffs and dispatches service people. What days and hours are service calls made? Are some types of service calls made 24/7 while others are Monday-Friday only? Explain how TWC prioritizes its service calls.

Service calls are dispatched 24/7 for wide area outages. Residential service calls are done between 8 a.m. and 10 p.m. seven days a week.

We prioritize through a system that categorizes by issue type (i.e. no service is a Response to City of Lincoln Performance Evaluation

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priority #1; other service issues are priority #2).

12. For dispatching purposes, is the city divided into quadrants or districts? Does a dispatcher adjust service calls through the day for service persons in one quadrant to go to another or does each service person start with a list in their quadrant and stick to that? How many service trucks are on the streets in Lincoln on an average day? What are average driving distances and service call times? What are short and long service call times?

We divide the city into quadrants or what we refer to as "map areas". Techs are assigned to specific map areas but may also cover other nearby/overlapping areas as needed.

There are approximately 25 TWC service trucks on calls in Lincoln each day.

Customers are given three time frames for calls -9 am to 12, 1 pm to 4 pm, and 4 pm to 9 pm.

13. What is the rationale for the 4-hour service schedule blocks? Is this customer-driven or company-driven? Is the 4 hour scheduling block a national, regional or Lincoln policy? What percentage of calls miss the 4-hour windows? If TWC used 2-hour windows, what would TWC anticipate the percentage of misses would be??

Technical calls are scheduled for 3- or 5-hour time frames, because we do not know ahead of time what will need to be done until a technician is on site and able to assess and repair the problem. Approximately 90% of service calls are completed within the time frame requested by the customer. At the customer's request, we will provide a courtesy call when the technician is in route. Best effort is made to accommodate a specific time requested by a customer. Evening and weekend service calls are available for customers who work and cannot meet a technician during regular business hours.

The time frames are set by the local divisions.

Projection on 2-hour windows: Unknown.

14. Has TWC asked customers if they'd prefer service call blocks other than the 4 hour window version? For example, a 1-hour alert call placed by actual service person could let many people rendezvous from work and then return to work with minimal time lost. Does TWC let customers choose a

"first of day" service call for a particular day?

## Refer to Question 13.

15. Is local TWC service policy set by people outside Nebraska or can TWC experiment if it wants? Please include any other information which would help explain the service process. Is TWC convinced that there is no other way of dispatching service people that would result in more satisfied customers?

Service policies are set locally. We are constantly evaluating better ways and technologies to improve the customer experience.

16. At the testimony of the first public hearing, one of the software developers indicated that his company always did audits at various stages of the project when doing a beta test or a new software test similar to the Navigator rollout. Has TW done any audits related to the Navigator project? When and how many? Can you provide us with the Navigator development life-cycle schedule, including major milestones and development phases? Please provide us with an indication of margin in memory utilization. How much timing margin is there in the accomplishment of command functions?

Using the definition found in the "IEEE Std. 1028-1997, IEEE Standard for Software Reviews, clause 3.2," <a href="http://en.wikipedia.org/wiki/Software\_audit\_review]">http://en.wikipedia.org/wiki/Software\_audit\_review]</a>, Time Warner has done "Software Management Reviews" and "Peer Reviews" as a normal component of our product development process. These internal audits (also called "post mortems") have been done several times upon completion of significant phases of the product development process. Using the definition for "Software Process Audit," Time Warner has not done an externally staffed, formal audit on this development project. It should be noted that such external audits are not routine and are not focused on technical issues, rather they are typically a review of processes and procedures.

Pertinent to this version of the [MDN] Navigator, we have the following engineering project chronology (note that while this is described in traditional "waterfall" approach, the actual workflow is iterative):

4Q 2003: Navigator Business Analysis & Initial Product Design

1Q 2004: Navigator Product Requirements

2Q 2004: Navigator V1 Feature Requirements & Product Development Begins

1Q 2005: Navigator V1 Development Complete

2Q 2005: 2Q 2005:	
4Q 2005:	Navigator Server Software Alpha Field Testing ('head-end installation
& configuration of Dual DN')	
1Q 2006:	Navigator V2 Development Complete (SD features)
1Q 2006:	
2Q 2006: 2Q 2006:	
3Q 2006:	Navigator V2 Beta Field Testing/Navigator V2 Deployment
4Q 2006:	Navigator V2 Deployment
1Q 2007:	Navigator V2 Deployment

We are not sure of the meaning of the question regarding margin in memory utilization and its relevancy to Navigator.